

LENS SYSTEM FOR PHASE PLATE FOR TRANSMISSION ELECTRON
MICROSCOPE AND TRANSMISSION ELECTRON MICROSCOPE

ABSTRACT OF THE DISCLOSURE

A lens system for use with a phase plate in a transmission electron microscope comprises a phase plate placed after the back-focal plane of the objective lens in an imaging system mounted downstream of the objective lens. Phase lenses image the back-focal plane of the objective lens onto the phase plate such that the position and tilt of the electron beam relative to the optical axis are made conjugate. An alignment coil may direct the electron beam going out of the phase lenses toward the phase plate. A second alignment coil may direct the electron beam going out of the phase plate toward the imaging lenses located after the phase plate.